

Who is currently living with HIV/AIDS? Detailed data tables and technical notes

Recent changes to the presentation of Massachusetts HIV/AIDS surveillance data

Effective January 1, 2011, the Massachusetts Department of Public Health (MDPH), Bureau of Infectious Diseases, HIV/AIDS fact sheets, epidemiologic reports and other HIV data presentations have been updated to remove all HIV/AIDS cases who were first diagnosed in another state before being reported in Massachusetts. As of January 1, 2012, this resulted in the removal of 3,529 HIV/AIDS cases, of which 914 have died and 2,615 were living. These persons living with HIV/AIDS may still continue to reside and receive care in the Commonwealth. The total number of persons living with HIV/AIDS, irrespective of location of diagnosis, is the basis for MDPH service planning. This change is partially a result of increased activities required by the Centers for Disease Control and Prevention (CDC) for de-duplication among states in an effort to identify cases that are counted multiple times in the National HIV/AIDS Surveillance System. The cases are assigned to the state that reports the earliest date of AIDS diagnosis if available. If the case has not progressed to AIDS, the case is assigned to the state with the earliest HIV diagnosis date. Please note that all previous HIV/AIDS fact sheets, data reports and presentations include cases that may have been first diagnosed in another state.

Also effective January 1, 2011, the MDPH HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to eliminate the presumed heterosexual exposure mode category for males; those cases have been reassigned to the no identified risk (NIR) exposure mode category. The presumed heterosexual exposure mode category was used with the intention of identifying HIV exposure mode for females when sex with males is the only reported risk factor, there is no evidence of current or past injection drug use (IDU), and behavioral risk and HIV status information about male sexual partners are unknown. Twenty-nine percent of females living with HIV/AIDS and 40% of recent female HIV diagnoses are reported in the presumed heterosexual exposure mode category. The application of the presumed heterosexual exposure mode category to males is overly inclusive in that female to male HIV transmission is biologically less probable, and there are alternate exposure modes that are possible for males, including sex with other men (MSM) or IDU. The CDC reports males diagnosed with HIV/AIDS who report sex with females as their only risk factor, without corresponding partner risk or HIV status information, in the NIR exposure mode category. This revision to report presumed heterosexual male HIV/AIDS cases as NIR will bring Massachusetts HIV/AIDS case reporting for males in alignment with CDC standards. The MDPH will maintain presumed heterosexual and heterosexual exposure mode categories for females.

These data represent only those individuals who tested positive for HIV infection, have sought and accessed medical care *and* have been reported to the HIV/AIDS Surveillance Program. Individuals who are unaware of their status, not in care, or not reported are not reflected.

The profile of people living with HIV/AIDS presented in “*Who is currently living with HIV/AIDS?*” can be used to inform planning for HIV care, treatment and support services, as well as the planning of prevention programs for people living with HIV/AIDS (positive prevention).

Table 1. People living with HIV/AIDS on December 31, 2012 by gender, race/ethnicity, place of birth and health service region: Massachusetts¹

People Living with HIV/AIDS on 12/31/12		
Gender:	N	%
Male	13,144	71%
Female	5,315	29%
Race/Ethnicity:	N	%
White, non-Hispanic	8,028	43%
Black, non-Hispanic	5,516	30%
Hispanic/Latino	4,506	24%
Asian/Pacific Islander	309	2%
Other/Unknown	100	1%
Place of Birth:	N	%
US	12,165	66%
Puerto Rico/US Dependency ²	1,929	10%
Non-US	4,365	24%
Health Service Region³:	N	%
Boston HSR	5,828	32%
Central HSR	1,598	9%
Metro West HSR	2,628	14%
Northeast HSR	2,892	16%
Southeast HSR	2,520	14%
Western HSR	2,032	11%
Prison ⁴	956	5%
Total⁵	18,459	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Ninety-eight percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, <1% were born in Guam and 2% were born in an unknown dependency.

³ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

⁴ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons are not an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁵ Total includes five persons living with HIV/AIDS with unknown HSR.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 2. People living with HIV/AIDS on December 31, 2012 by gender and race/ethnicity: Massachusetts¹

Race/Ethnicity:	Male		Female	
	N	%	N	%
White, non-Hispanic	6,667	51%	1,361	26%
Black, non-Hispanic	3,125	24%	2,391	45%
Hispanic/Latino	3,049	23%	1,457	27%
Asian/Pacific Islander	240	2%	69	1%
Other/Unknown	63	<1%	37	1%
Total	13,144	100%	5,315	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 3. People living with HIV/AIDS on December 31, 2012 by race/ethnicity and place of birth: Massachusetts¹

Race/Ethnicity:	US		Puerto Rico/ US Dependency ²		Non-US		Total
	N	%	N	%	N	%	N
White (NH)	7,530	94%	14	<1%	484	6%	8,028
Black (NH)	3,002	54%	16	<1%	2,498	45%	5,516
Hispanic/Latino	1,468	33%	1,899	42%	1,139	25%	4,506
API	79	26%	0	0%	230	74%	309
Other/Unknown	86	86%	0	0%	14	14%	100

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Ninety-eight percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, <1% were born in Guam and 2% were born in an unknown dependency.

(NH)= Non-Hispanic, API=Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 4. People living with HIV/AIDS on December 31, 2012 by gender and place of birth: Massachusetts¹

Place of Birth:	Male		Female	
	N	%	N	%
United States (US)	9,306	71%	2,859	54%
Puerto Rico/US Dependency ²	1,274	10%	655	12%
Non-US	2,564	20%	1,801	34%
Total	13,144	100%	5,315	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Ninety-eight percent of people living with HIV/AIDS who were born in a US Dependency were born in Puerto Rico, <1% were born in the US Virgin Islands, <1% were born in Guam and 2% were born in an unknown dependency.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 5. People living with HIV/AIDS on December 31, 2012 by current age and gender: Massachusetts¹

Age in years	Male		Female		State Total	
	N	%	N	%	N	%
Under 13	12	<1%	14	<1%	26	<1%
13 to 19	58	<1%	58	1%	116	1%
20 to 24	187	1%	107	2%	294	2%
25 to 29	379	3%	148	3%	527	3%
30 to 34	591	4%	304	6%	895	5%
35 to 39	803	6%	503	9%	1,306	7%
40 to 44	1,428	11%	756	14%	2,184	12%
45 to 49	2,553	19%	1,027	19%	3,580	19%
50 to 54	2,878	22%	992	19%	3,870	21%
55 to 59	2,102	16%	748	14%	2,850	15%
60+	2,153	16%	658	12%	2,811	15%
Total	13,144	100%	5,315	100%	18,459	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 6. People living with HIV/AIDS by exposure mode: Massachusetts¹		
People Living with HIV/AIDS on 12/31/12		
Exposure Mode:	N	%
Male-to-male sex (MSM)	6,720	36%
Injection drug use (IDU)	3,753	20%
MSM/IDU	627	3%
Receipt of blood/blood products/other	72	<1%
Pediatric	337	2%
Total heterosexual sex (HTSX)	2,647	14%
• HTSX w/ an injection drug user	885	5%
• HTSX w/ bisexual male (females only)	45	<1%
• HTSX w/ a person w/ HIV or AIDS	1,671	9%
• Other HTSX ²	46	<1%
Total undetermined/other	4,303	23%
• Presumed heterosexual sex ³	1,600	9%
• Undetermined/other ⁴	2,703	15%
Total	18,459	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes heterosexual sex with a person who received blood/blood products.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Note: The category of “presumed heterosexual” is used in Massachusetts to re-assign females who are reported with an exposure of heterosexual sex, but only with a partner of unknown HIV status or behavioral risk. Massachusetts uses the category of presumed heterosexual to distinguish these female cases from other undetermined cases about which we know less. Prior to January 1, 2011, the presumed heterosexual category was also used to report HIV data in males. The rationale for the application of the presumed heterosexual exposure mode category to females only has been addressed in the MDPH OHA report “Intersecting Risks: HIV Infection among Heterosexual Women and Men in Massachusetts.” (2010) http://www.mass.gov/Eeohhs2/docs/dph/aids/intersecting_risks.pdf. Nationally, the Centers for Disease Control and Prevention categorize “presumed heterosexual” cases as “no identified risk” (NIR). As such, comparisons of the presumed heterosexual category cannot be made to national data. Caution should be used in interpreting data for presumed heterosexual, as it is still not clear what the exposure risk was for females in this category. Although a person may not report other risk behaviors, such as injection drug use to a health care provider, it does not exclude the possibility that an individual has experienced these other risks. There are many barriers to disclosing HIV risk behaviors in the health care setting such as a limited patient-provider relationship or stigma.

Table 7. People living with HIV/AIDS on December 31, 2012 by gender and exposure mode: Massachusetts¹

Exposure Mode:	Male		Female	
	N	%	N	%
Male-to-male sex (MSM)	6,720	51%	N/A	N/A
Injection drug use (IDU)	2,479	19%	1,274	24%
MSM/IDU	627	5%	N/A	N/A
Heterosexual sex	782	6%	1,865	35%
Other	223	2%	186	3%
Total undetermined/other	2,313	18%	1,990	37%
• Presumed heterosexual sex ²	N/A	N/A	1,600	30%
• Undetermined ³	2,313	18%	390	7%
Total	13,144	100%	5,315	100%

¹ Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

² Includes female sex with male of unknown HIV status or risk. This category is limited to females.

³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

N/A=Not Applicable

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 8. People living with HIV/AIDS on December 31, 2012 by race/ethnicity¹ and exposure mode: Massachusetts²

Exposure Mode:	White (NH)		Black (NH)		Hispanic/Latino		API	
	N	%	N	%	N	%	N	%
Male-male sex (MSM)	4,702	59%	876	16%	973	22%	134	43%
Injection drug use (IDU)	1,367	17%	897	16%	1,453	32%	17	6%
MSM/IDU	390	5%	110	2%	120	3%	-- ⁵	-- ⁵
Heterosexual sex	555	7%	1,154	21%	888	20%	34	11%
Other	119	1%	167	3%	117	3%	-- ⁵	-- ⁵
Total undetermined/other	895	11%	2,312	42%	955	21%	117	38%
• Pres. HTSX ³	226	3%	1,027	19%	314	7%	24	8%
• Undetermined ⁴	669	8%	1,285	23%	641	14%	93	30%
Total	8,028	100%	5,516	100%	4,506	100%	309	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

(NH) = Non-Hispanic, API = Asian/Pacific Islander, Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 9. Males living with HIV/AIDS on December 31, 2012 by race/ethnicity¹ and exposure mode: Massachusetts²

	White (NH)		Black (NH)		Hispanic/ Latino		API	
Exposure Mode:	N	%	N	%	N	%	N	%
Male-male sex (MSM)	4,702	71%	876	28%	973	32%	134	56%
Injection drug use (IDU)	766	11%	610	20%	1,079	35%	14	6%
MSM/IDU	390	6%	110	4%	120	4%	-- ⁴	-- ⁴
Heterosexual sex	146	2%	362	12%	260	9%	12	5%
Other	71	1%	88	3%	63	2%	-- ⁴	-- ⁴
Undetermined ³	592	9%	1,079	35%	554	18%	77	32%
Total	6,667	100%	3,125	100%	3,049	100%	240	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.³ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.⁴ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

(NH) = Non-Hispanic, API = Asian/Pacific Islander

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 10. Females living with HIV/AIDS on December 31, 2012 by race/ethnicity¹ and exposure mode: Massachusetts²

	White (NH)		Black (NH)		Hispanic/ Latina		API	
Exposure Mode:	N	%	N	%	N	%	N	%
Injection drug use	601	44%	287	12%	374	26%	-- ⁵	-- ⁵
Heterosexual sex	409	30%	792	33%	628	43%	22	32%
Other	48	4%	79	3%	54	4%	-- ⁵	-- ⁵
Total undetermined/other	303	22%	1,233	52%	401	28%	40	58%
• Pres. HTSX ³	226	17%	1,027	43%	314	22%	24	35%
• Undetermined ⁴	77	6%	206	9%	87	6%	16	23%
Total	1,361	100%	2,391	100%	1,457	100%	69	100%

¹ Data for American Indian/Alaska Native and Other/Unknown race/ethnicity are not presented due to small numbers.² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.⁴ Includes those still being followed up for risk information, those who have died with no determined risk and those lost to follow-up, and those with confirmed occupational exposure.⁵ Values less than five are suppressed for populations less than 50,000 or for populations of unknown size. Additional values may be suppressed to prevent back calculation.

(NH) = Non-Hispanic, API = Asian/Pacific Islander, Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13

Table 11. People living with HIV/AIDS on December 31, 2012 by Health Service Region (HSR)¹ and gender: Massachusetts²

Health Service Region	Male		Female		Total
	N	%	N	%	N
Boston HSR	4,453	76%	1,375	24%	5,828
Central HSR	983	62%	615	38%	1,598
Metro West HSR	1,886	72%	742	28%	2,628
Northeast HSR	1,915	66%	977	34%	2,892
Southeast HSR	1,779	71%	741	29%	2,520
Western HSR	1,291	64%	741	36%	2,032
Prison ³	835	87%	121	13%	956
Massachusetts Total⁴	13,144	71%	5,315	29%	18,459

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁴ Mass. total includes five persons living with HIV/AIDS with unknown residence at time of report.

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding) , data as of 1/1/13

Table 12. People living with HIV/AIDS on December 31, 2012 by Health Service Region (HSR)¹ and race/ethnicity: Massachusetts²

HSR	White (NH)		Black (NH)		Hispanic/ Latino		API		Other/Und.		Total
	N	%	N	%	N	%	N	%	N	%	N
Boston	2,344	40%	2239	38%	1,134	19%	86	1%	25	<1%	5,828
Central	675	42%	405	25%	490	31%	23	1%	5	<1%	1,598
Metro West	1,322	50%	907	35%	330	13%	60	2%	9	<1%	2,628
Northeast	1,245	43%	699	24%	830	29%	100	3%	18	1%	2,892
Southeast	1,542	61%	566	22%	372	15%	17	1%	23	1%	2,520
Western	626	31%	403	20%	973	48%	16	1%	14	1%	2,032
Prison ³	272	28%	297	31%	377	39%	5	1%	5	1%	956
Total⁴	8,028	43%	5516	30%	4,506	24%	309	2%	100	1%	18,459

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁴ Mass. total includes five persons living with HIV/AIDS with unknown residence at time of report.

(NH)= Non-Hispanic , API = Asian/Pacific Islander, Other/Und. = Other/Undetermined

Data Source: MDPH HIV/AIDS Surveillance Program, data as of 1/1/13

Table 13. Percentage distribution of people living with HIV/AIDS on December 31, 2012 by Health Service Region (HSR)¹ and exposure mode: Massachusetts²

HSR	MSM	IDU	MSM/ IDU	HTSX	Other	Pres. HTSX ³	Undet. ⁴	Total
	%	%	%	%	%	%	%	N
Boston	48%	13%	4%	13%	2%	8%	13%	5,828
Central	25%	28%	3%	19%	3%	11%	12%	1,598
Metrowest	40%	11%	3%	14%	3%	11%	19%	2,628
Northeast	31%	17%	3%	16%	2%	11%	19%	2,892
Southeast	39%	21%	3%	15%	2%	7%	13%	2,520
Western	26%	28%	3%	18%	3%	9%	13%	2,032
Prison ⁵	7%	66%	7%	7%	<1%	1%	12%	956
Total⁶	36%	20%	3%	14%	2%	9%	15%	18,459

¹ Reflects the health service region of a person's residence at the time of report (not necessarily current residence). See Epidemiologic Profile General Appendices, Health Service Region Maps, available at

http://www.mass.gov/dph/aids/research/profile2005/app5_hrs_maps.pdf for configuration of health service regions.

² Effective, January 1, 2011 the Massachusetts Department of Public Health, HIV/AIDS fact sheets, epidemiologic reports, and other data presentations have been updated to remove all HIV/AIDS cases that were first diagnosed in another state before being reported in Massachusetts.

³ Includes female sex with male of unknown HIV status or risk. This category is limited to females.

⁴ Includes male sex with female of unknown HIV status or risk, those still being followed up for risk information, those who have died with no determined risk, and those lost to follow-up.

⁵ HSRs are regions defined geographically to facilitate targeted health service planning. While prisons do not constitute an HSR, the prison population is presented separately in this analysis because of its unique service planning needs. Prisons include only persons who were diagnosed with HIV/AIDS while in a correctional facility. These data do not reflect current incarceration status.

⁶ Mass. total includes five persons living with HIV/AIDS with unknown residence at time of report.

MSM = Male-to-Male Sex; IDU = Injection Drug Use; MSM/IDU = Male-to-Male Sex and Injection Drug Use; HTSX = Heterosexual Sex; Pres. HTSX = Presumed Heterosexual Sex

Data Source: MDPH HIV/AIDS Surveillance Program (percentages may not add up to 100% due to rounding), data as of 1/1/13